

CLAIMS

1. An electronic wallet, comprising:

means for storing and managing electronic information including a specific private key and its mating certificate and information signed by said private key.

2. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information.

3. An electronic wallet set forth in claim 1, further comprising:

information signed by the issuer of said electronic information.

4. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information, and further comprising:

fixed information signed by the issuer of said electronic information.

5. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information, and further comprising:

fixed information signed by the issuer of said electronic information and presentation control information, wherein presentation data is generated by using all those three types of information.

6. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information, and further comprising:

fixed information signed by the issuer of said electronic information and information for obtaining presentation control information.

7. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information, and further comprising:

fixed information signed by the issuer of said electronic information and information for obtaining the presentation resource signed or not signed by the issuer of the electronic information, wherein

presentation data is generated by using all those three types of information.

8. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information, and further comprising:

fixed information signed by the issuer of said electronic information and information for obtaining the presentation resource signed or not signed by the issuer of the electronic information.

9. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information, and further comprising:

fixed information and authentication key of electronic information handler, both signed by the issuer of said electronic information, wherein

said electronic information handler performs the transaction processing with a terminal having electronic information.

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10. An electronic wallet set forth in claim 1, wherein information signed by said private key is variable information, and further comprising:

fixed information and service control information, both signed by the issuer of said electronic information, wherein said service control information defines the transaction processing performed by the electronic information.

11. An electronic wallet set forth in any one of claims 1 to 10, further comprising:

means for generating an electronic information object from electronic information, said electronic information object including a private key and the certificate thereof as internal variable.

12. An electronic wallet set forth in claim 10, further comprising:

means for generating electronic information object from electronic information and for controlling said electronic information, wherein

said electronic information object embeds the transaction processing data on the basis of said service control information into each message to be exchanged during the transaction.

13. An electronic wallet set forth in claim 12, wherein the service control information is comprised of a combination of service control modules information.

14. An electronic wallet set forth in claim 12, wherein message to be embedded into the service control information by the electronic information object requests to

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the electronic information handler the transaction process from the electronic information object.

15. An electronic wallet set forth in claim 12, wherein message to be embedded into the service control information by the electronic information object instructs the electronic information object to update the property value from the electronic information handler.

16. An electronic wallet set forth in claim 12, wherein message to be embedded into the service control information by the electronic information object presents the update result of the property value from the electronic information object to the electronic information handler.

17. An electronic wallet set forth in claim 12, wherein message to be embedded into the service control information by the electronic information object is a message corresponding to a receipt for the electronic information.

18. A service terminal, comprising means for storing and managing an electronic information handler having fixed information and an authentication key of electronic information object, both signed by the issuer of the electronic information handler.

19. A service terminal, comprising means for storing and managing an electronic information handler having fixed information and service control information and authentication key of electronic information object, all signed by the issuer of the electronic information handler.

20. A service terminal set forth in claim 19, wherein

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21. A service terminal set forth in claim 20, further comprising:

22. A service terminal set forth in claim 19, wherein said electronic information handler object of said electronic information handler embeds the transaction processing data on the basis of said service control information into each message to be exchanged during the transaction processing.

24. A service terminal set forth in either set forth in claim 23 or 24, wherein

messages carrying the transaction data by the electronic information handler object of said electronic information handler include a message for requesting the transaction processing from the electronic information to the electronic information handler, a message for instructing the update of property value from the electronic information handler to the

electronic information, a message for presenting the update result of property value from the electronic information to the electronic information handler, and a message corresponding to a receipt from the electronic information handler to the electronic information.

25. A method for generating electronic information, comprising the steps of:

generating a private key specific to the electronic information and variable information; and

digitally signing said variable information with said specific private key.

26. A method for generating electronic information, comprising the steps of:

generating a private key specific to the electronic information, variable information, and fixed information;

digitally signing said variable information with said specific private key; and

digitally signing said fixed information by the issuer of electronic information.

27. A method for generating electronic information, comprising the steps of:

generating a private key specific to the electronic information, variable information, fixed information, presentation control information, and presentation resource;

digitally signing said variable information with said specific private key; and

digitally signing said fixed information, identifier information of said presentation control information and

identifier information of said presentation resource information by the issuer of electronic information.

28. A method for generating electronic information, comprising the steps of:

generating a private key specific to the electronic information, variable information, fixed information, service control information, presentation control information, and presentation resource;

digitally signing said variable information with said specific private key; and

digitally signing said fixed information, said service control information, identifier information of said presentation control information and identifier information of said presentation resource information by the issuer of electronic information.

29. A method for generating electronic information set forth in any one of claims 25 to 28, further comprising the steps of:

generating the presentation control information and presentation resource of the electronic information in correspondence with the property of an electronic wallet; and

digitally signing said presentation control information by the issuer thereof.

30. A communication method, comprising the steps of:

providing at least two or more wireless communication means, first wireless communication means being used for obtaining an initiation message from the other party's device, second wireless communication means being used for selecting

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a device indicated by the identifier information of said other party's device included in said initiation message;

establishing a communication session with said other party's device; and

starting communication by means of said second wireless communication means.

31. A communication method set forth in claim 30, further comprising the steps of:

including the identifier information of communication session arbitrary configured by the other party's device along with the identifier information of said other party's device in the initiation message; and

authenticating by means of the identifier information of said communication session at the time when said second wireless communication means establishes a communication session with the other party's device.

32. A communication method, comprising the steps of:

providing at least two or more wireless communication means, first wireless communication means being used for sending an initiation message including the identifier information of sender to the other party's device;

establishing a communication session with said other party's device in response to a communication session establishment request from said other party's device by means of second wireless communication means; and

starting communication by means of said second wireless communication means.

33. A communication method set forth in claim 32,

further comprising the steps of:

including the identifier information of communication session arbitrary configured along with the identifier information of sender in the initiation message; and

authenticating by means of the identifier information of said communication session at the time when said second wireless communication means establishes a communication session with the other party's device.

34. A communication method, comprising the steps of:

providing at least two or more wireless communication means, first wireless communication means being used for exchange initiation messages including the identifier information of sender to each other;

authenticating the other party's device by checking the identifier information of the other party's device included in the initiation message, in response to the communication session establishment request by means of second wireless communication means from the other party's device to which said initiation messages were exchanged; and

establishing a communication session with said other party's device to start communication by means of said second wireless communication means.

35. A communication method set forth in any one of claims 30 to 34, further comprising the steps of:

including the identifier information of a wireless communication means to be used as second wireless communication means in the initiation message;

using the wireless communication means indicated by said

identifier information for the second wireless communication means to establish a communication session with the other party's device; and

starting communication by means of said second wireless communication method.

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